



Utah Water Assessment & Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors

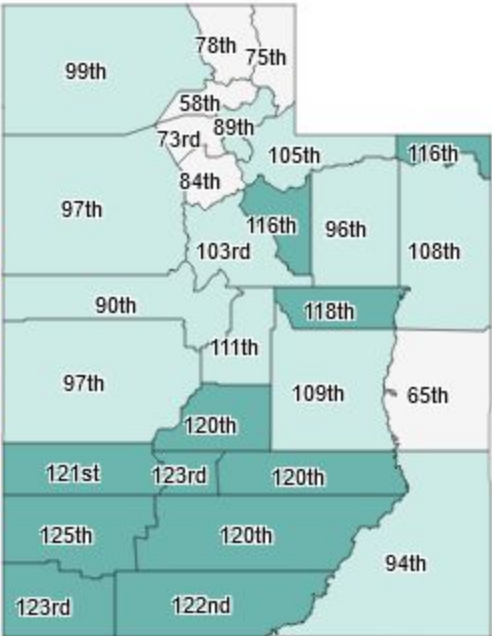
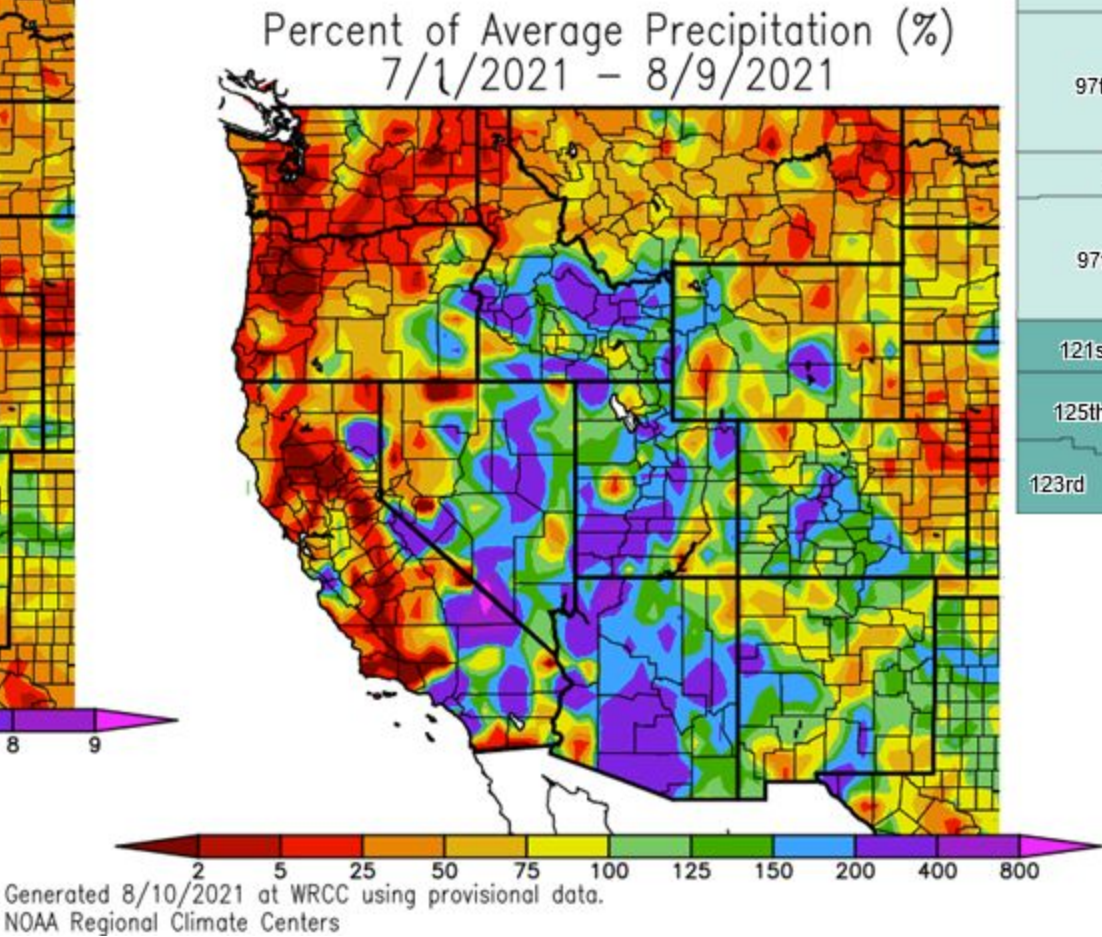
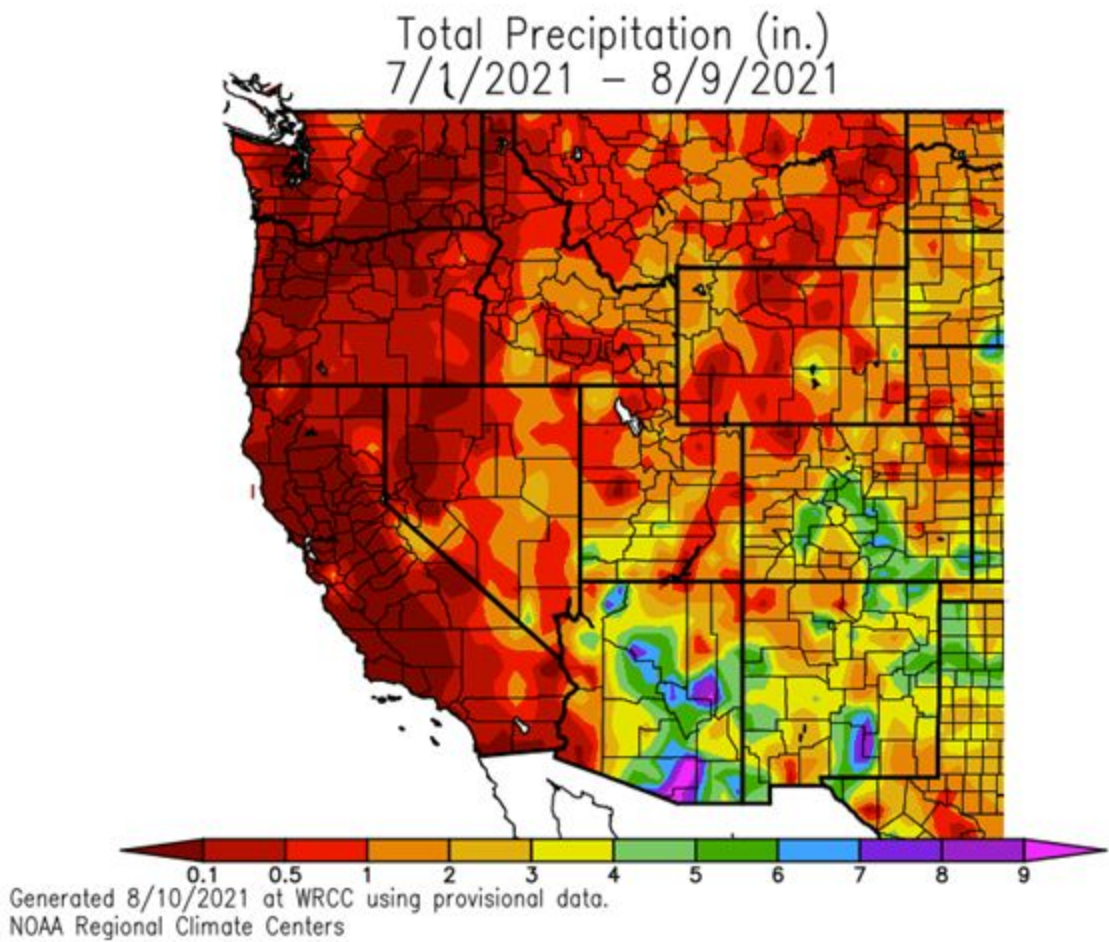




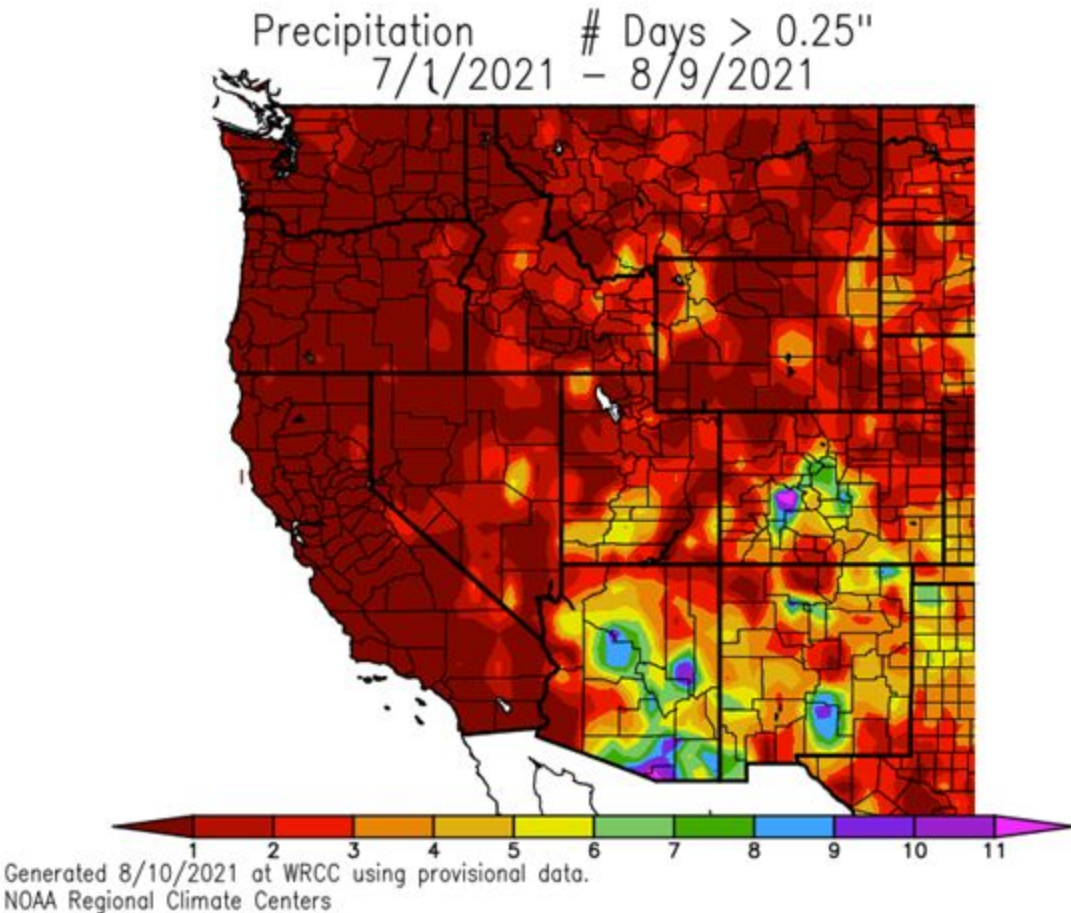
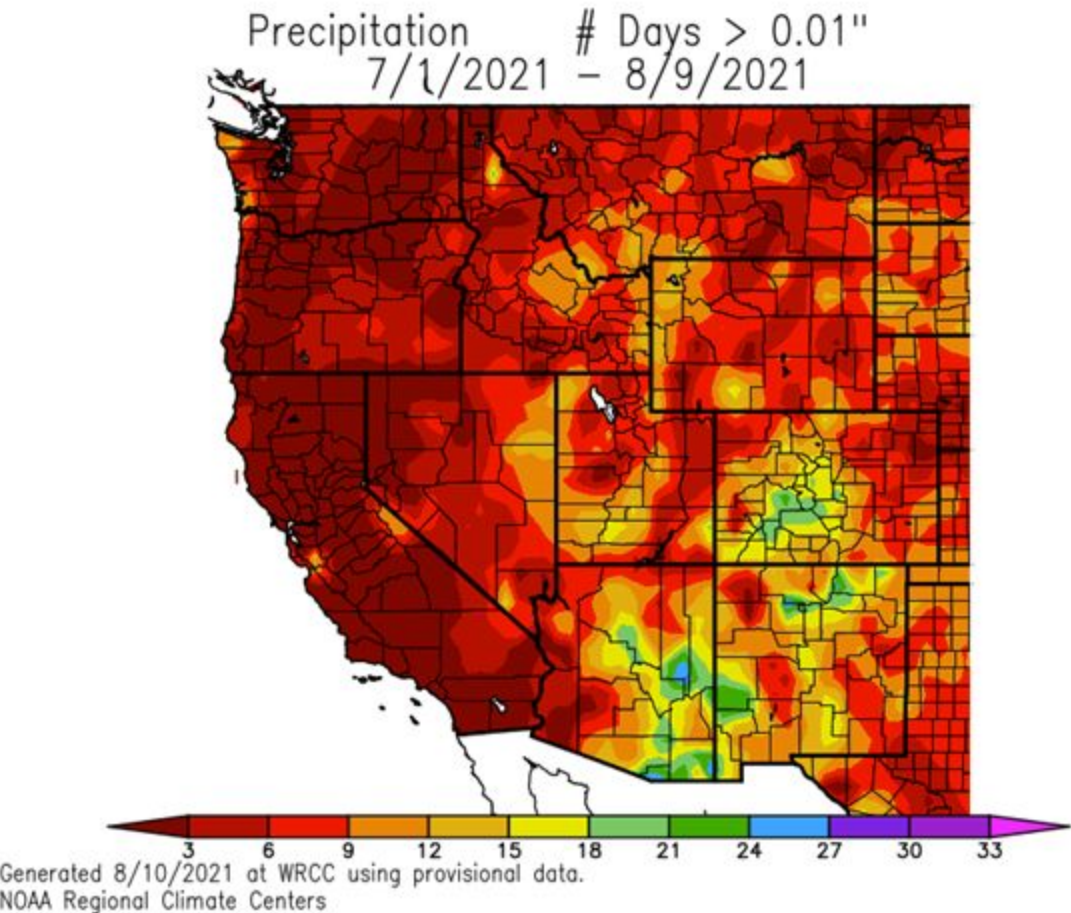
Utah Water Assessment & Conditions Monitoring Webinar

August 10, 2021

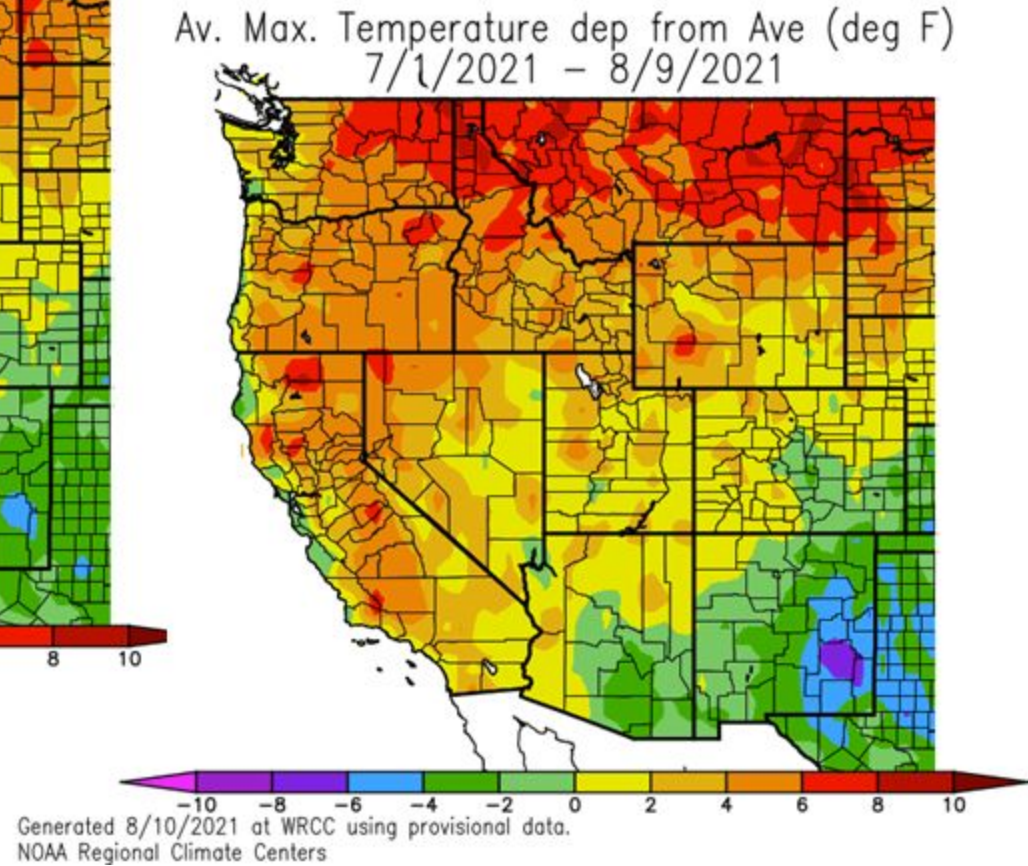
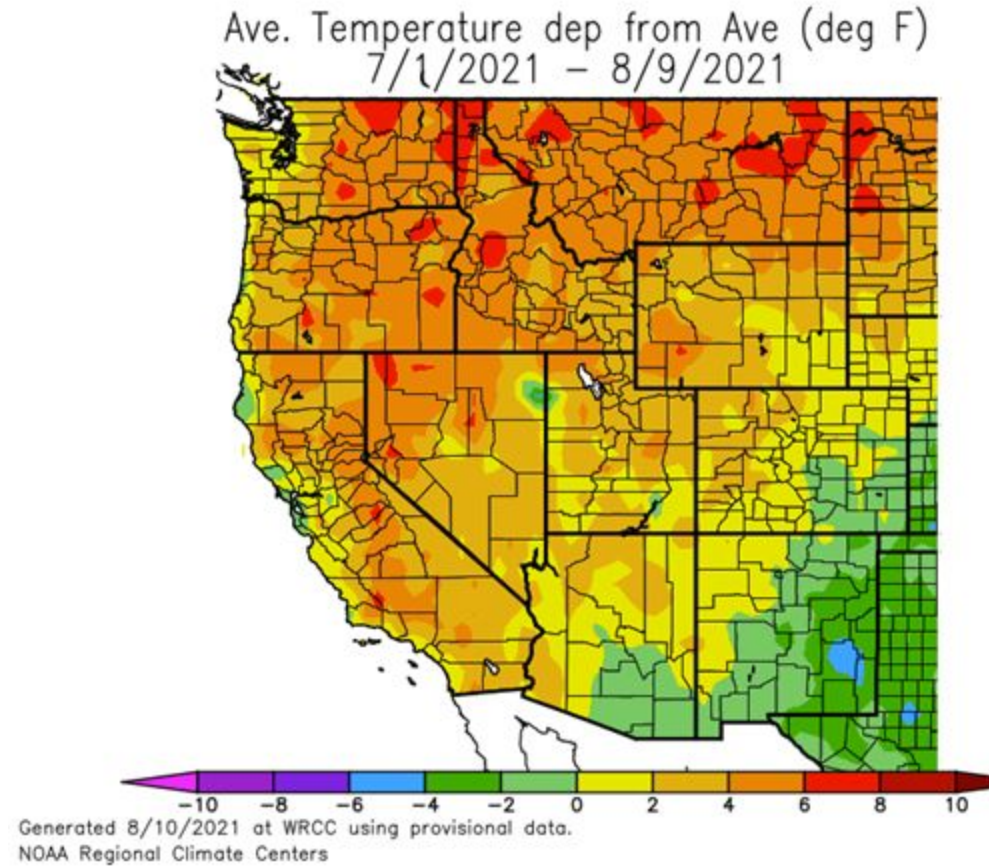
Precipitation History Since July 1



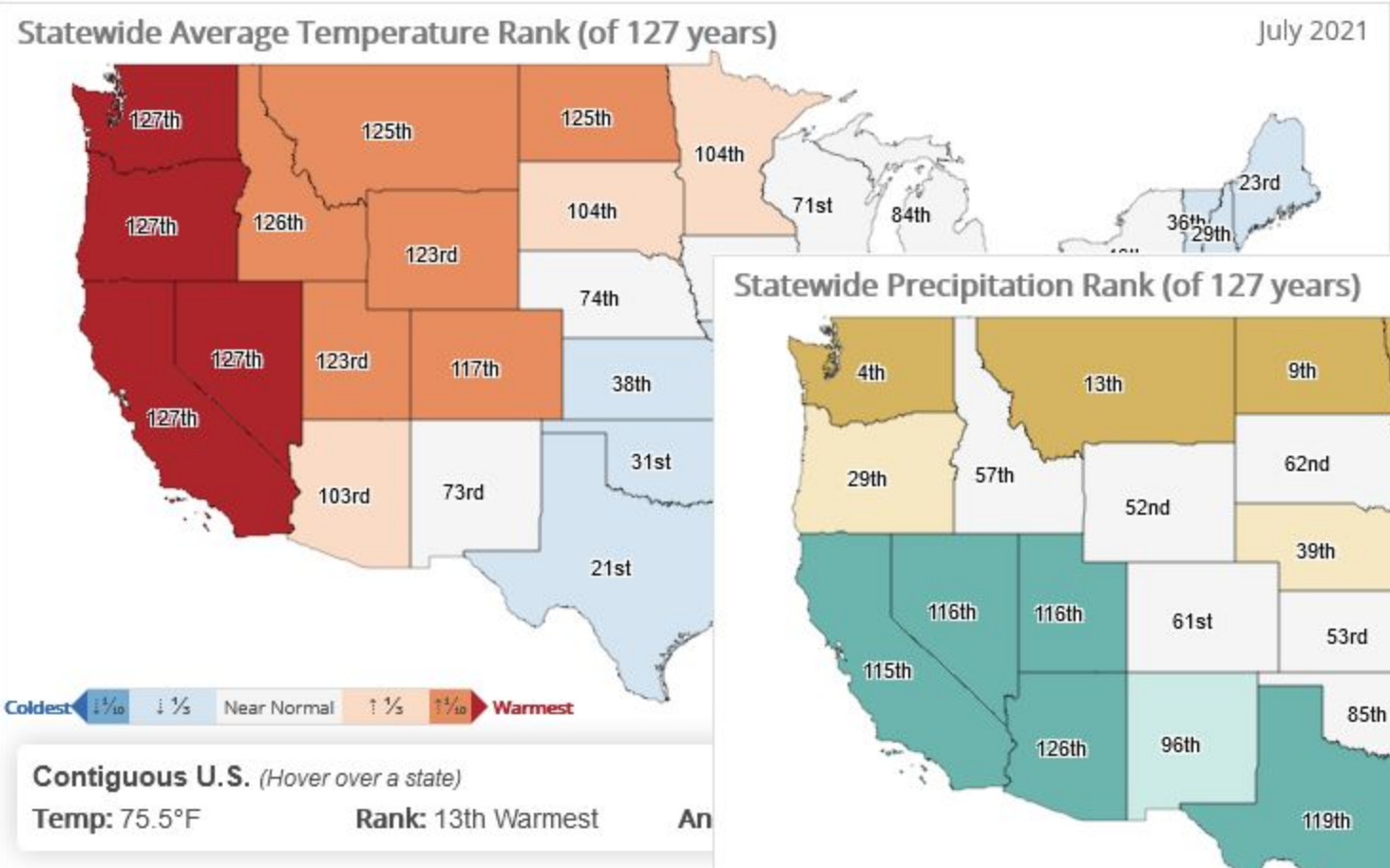
Precipitation Frequency and Intensity



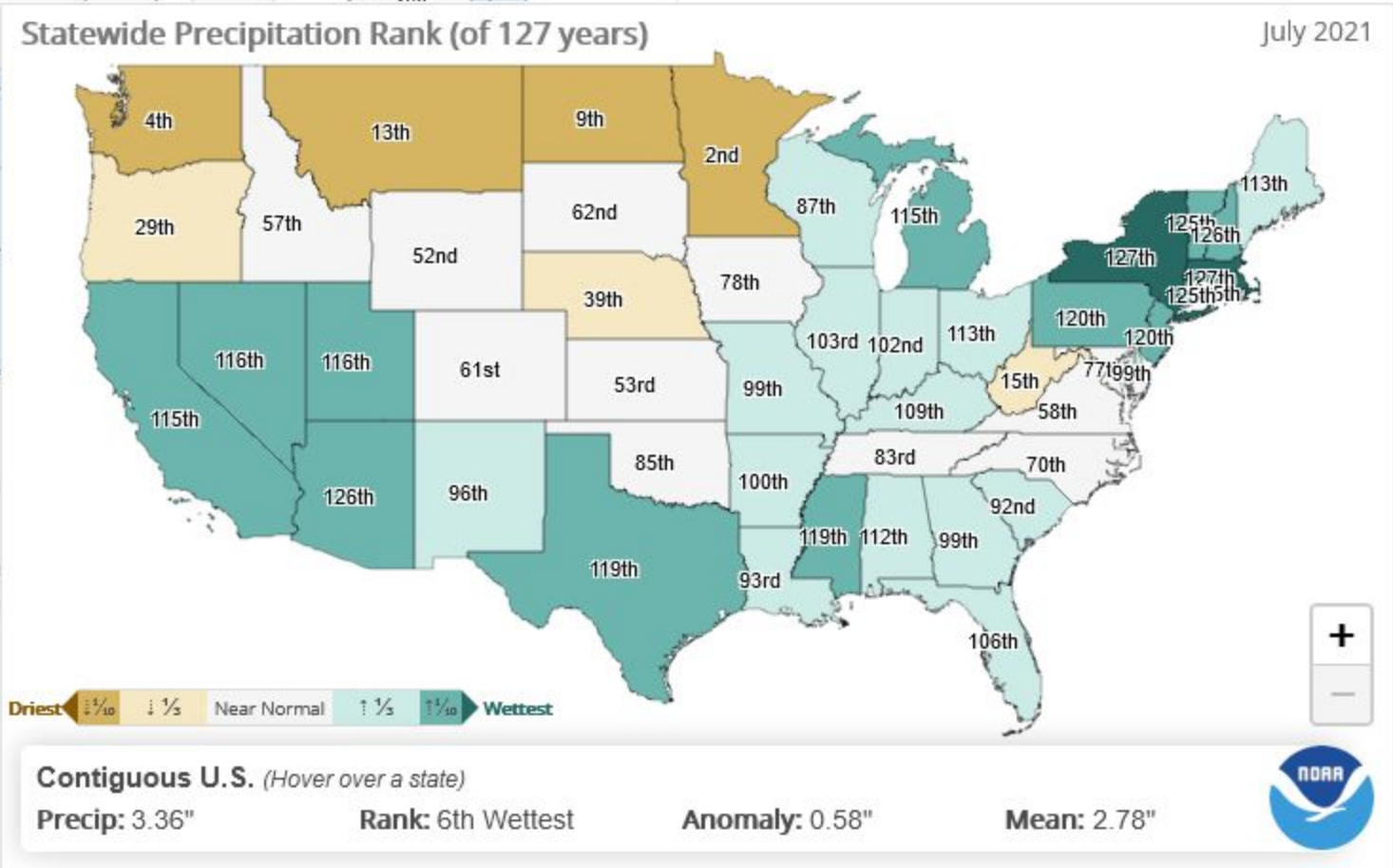
Temperature history since July 1



July's Climate Summary



11th wettest July on record

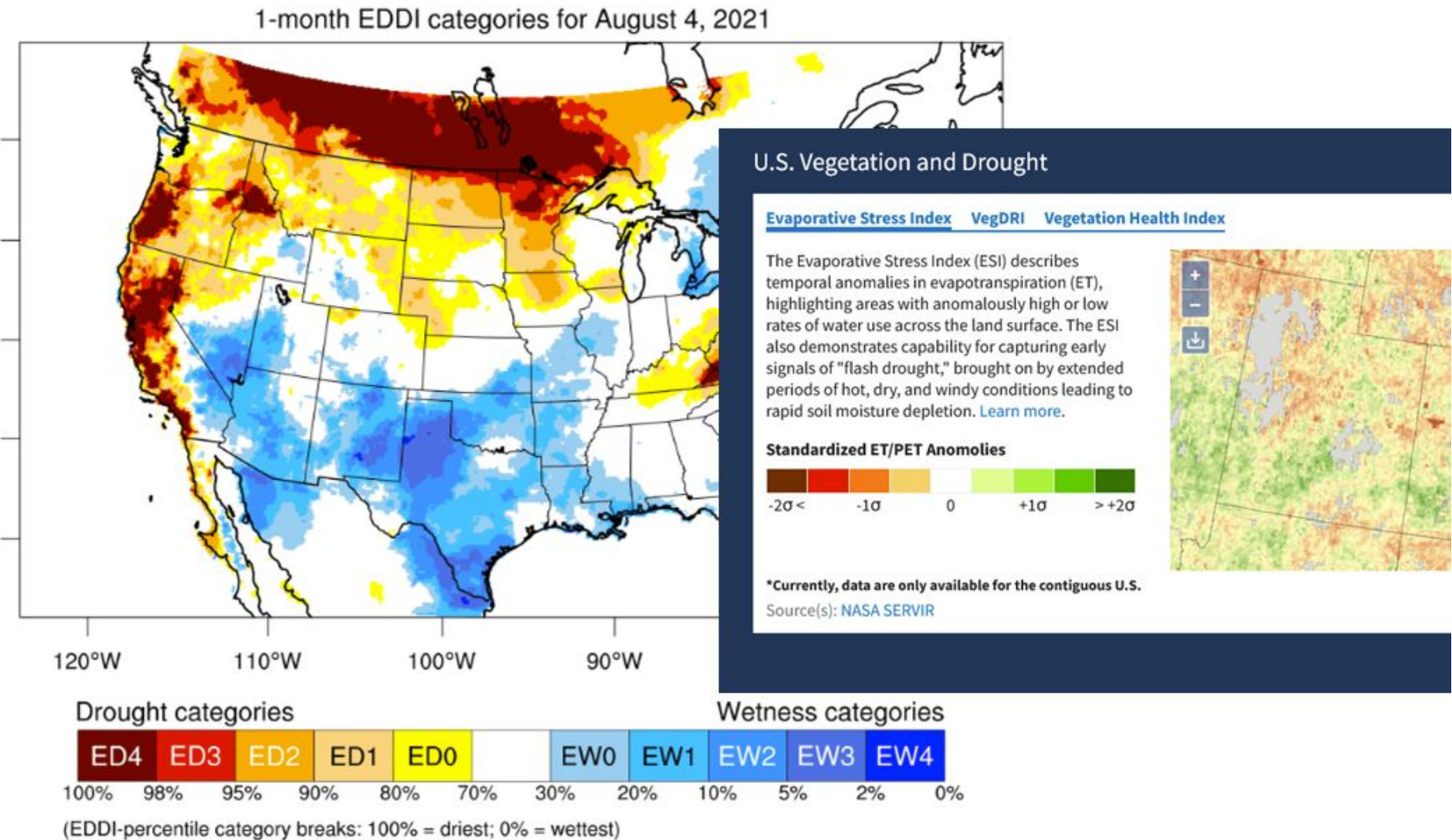


4th hottest July on record
(June was hottest on record)

Evaporative Demand Drought Index & Evaporative Stress Index

Evaporative demand has been normal to below normal for this time of year and is not stressing drought conditions.

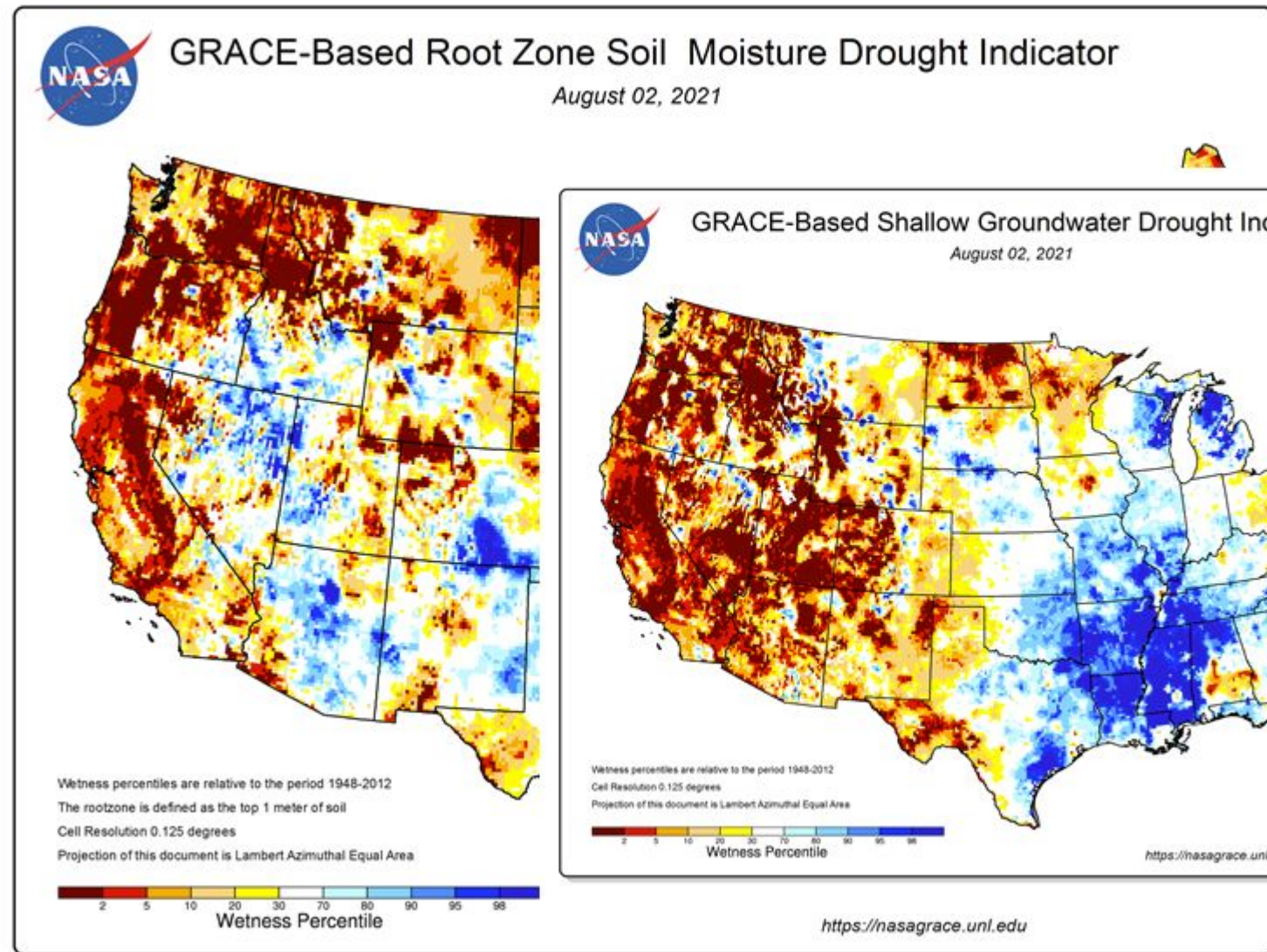
Recent Et anomalies suggest northwest Utah has featured greater evaporative stress.



GRACE Satellite Soil Moisture Observations

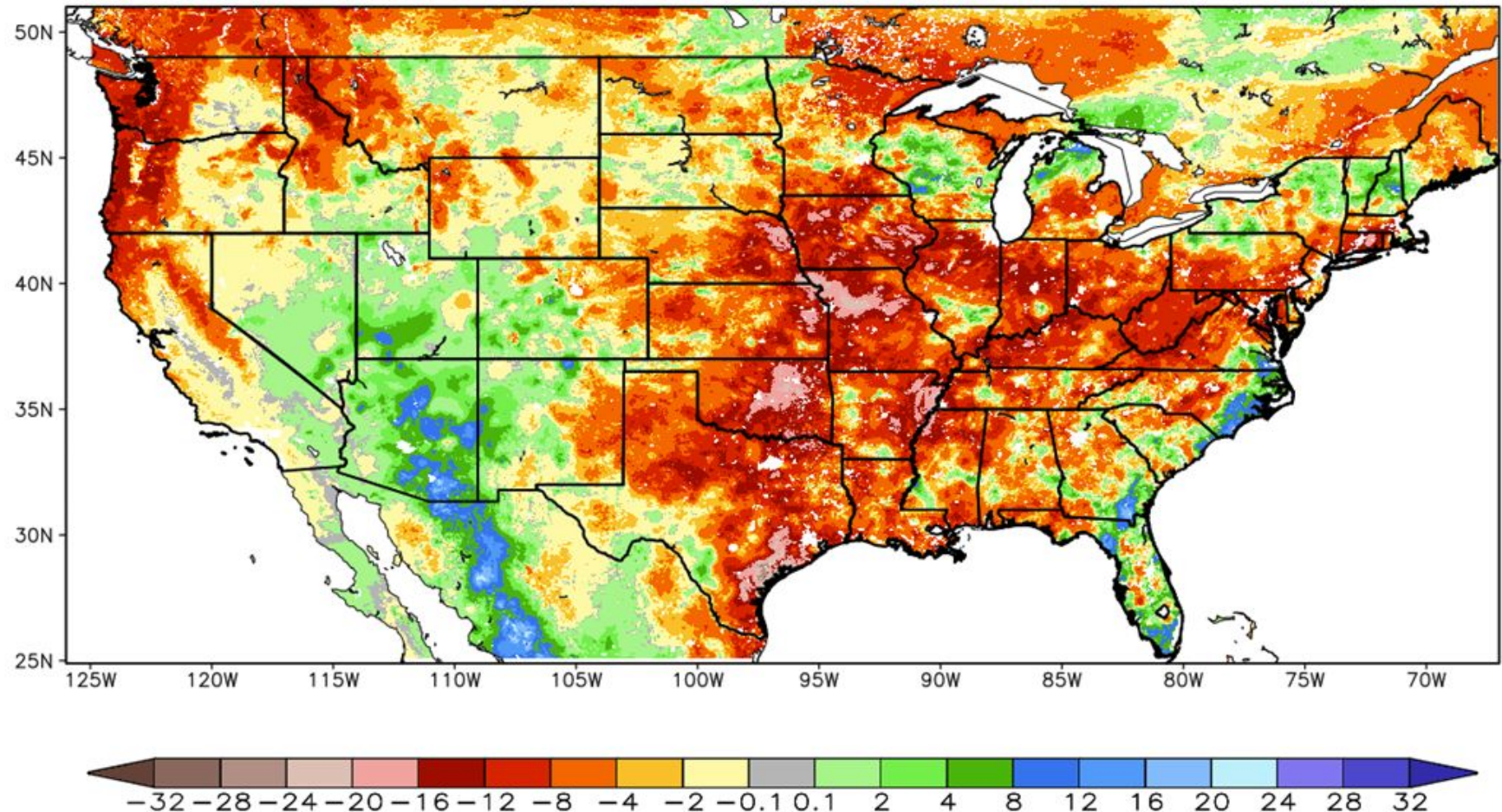
Root zone soil moisture (top 1-meter) has improved dramatically.

Groundwater remains heavily depleted.



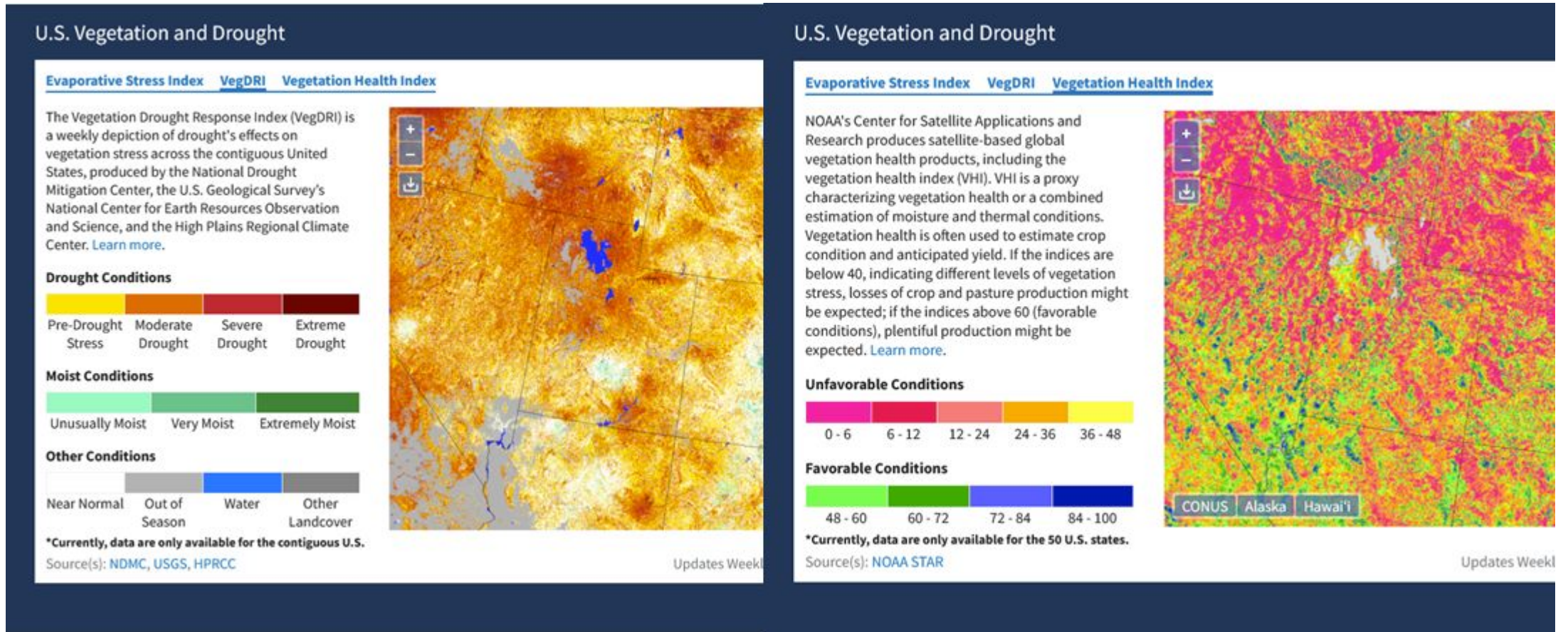
1-month changes to total soil moisture content

1-Month Difference in Column Relative Soil Moisture (%) valid 12z 10 Aug 2021



The monsoon season has clearly improved soil moisture across much of the state.

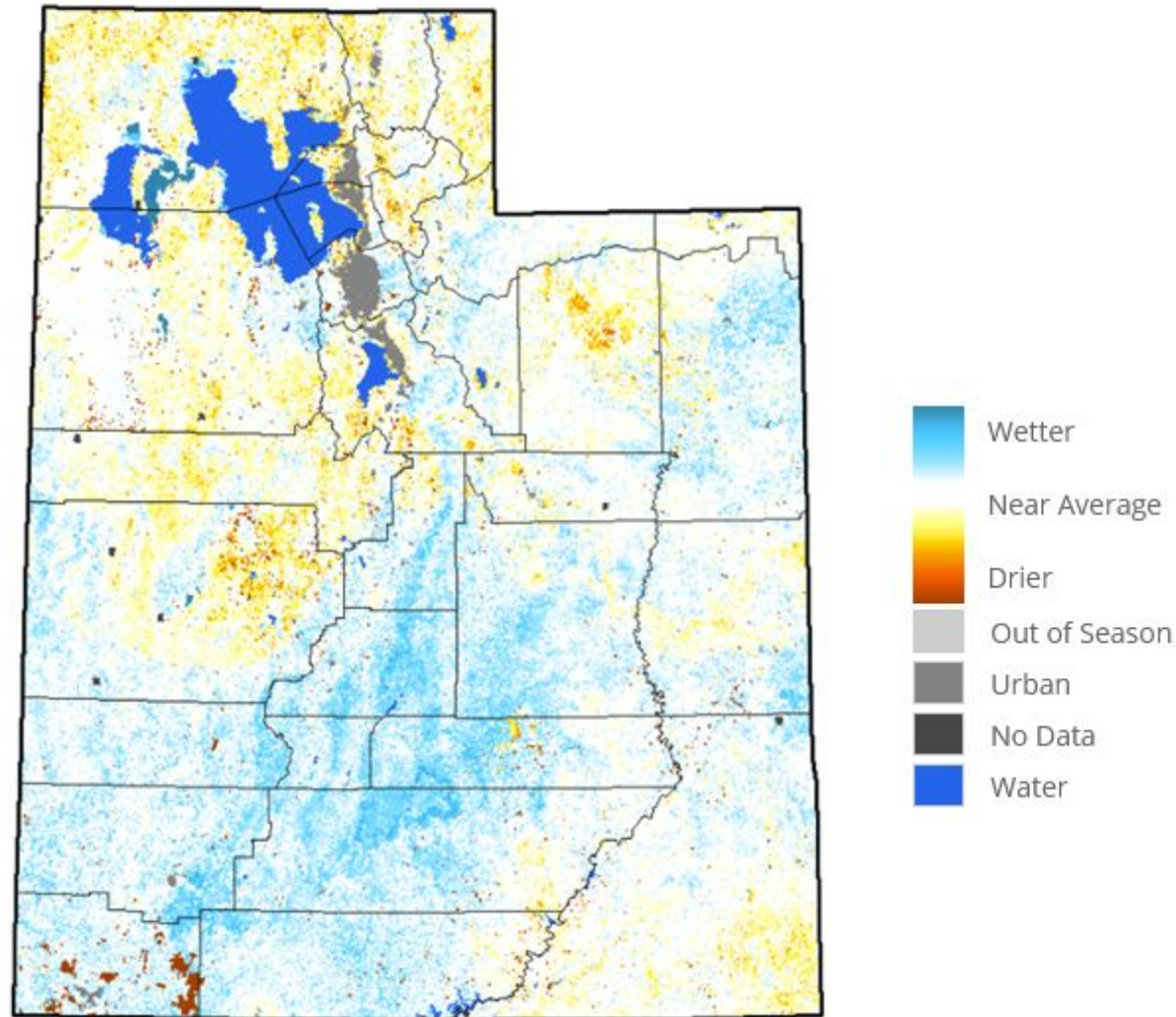
Vegetative Drought metrics



Vegetation health metrics have improved for the wetter south western region but remains categorized as heavily unfavorable for healthy vegetation for the majority of the state

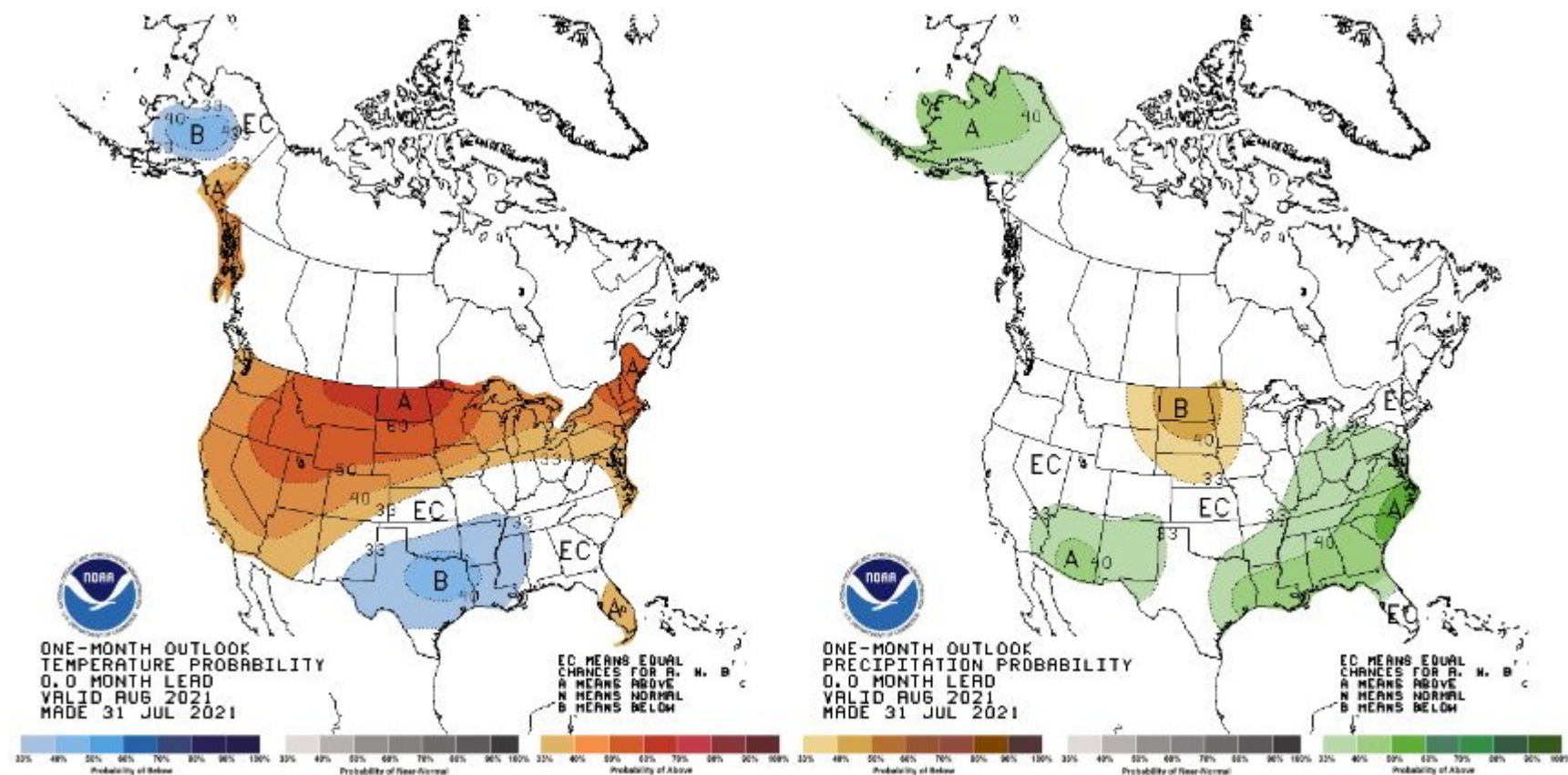
Quick Drought Response Index (QuickDRI)

Little concern for new intensification of drought over short term, but northern Utah remains under a watchful eye.

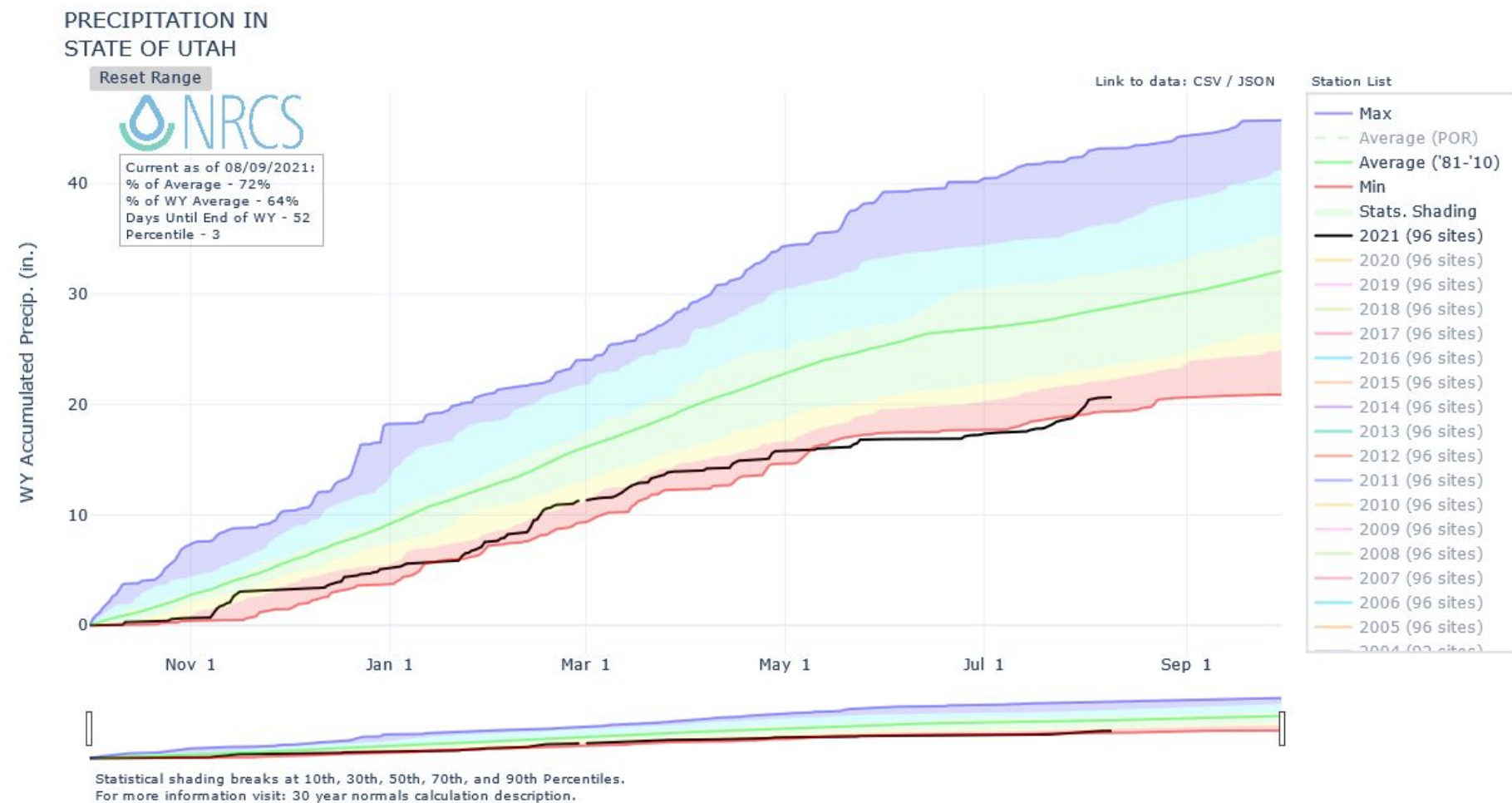


August Seasonal Outlook

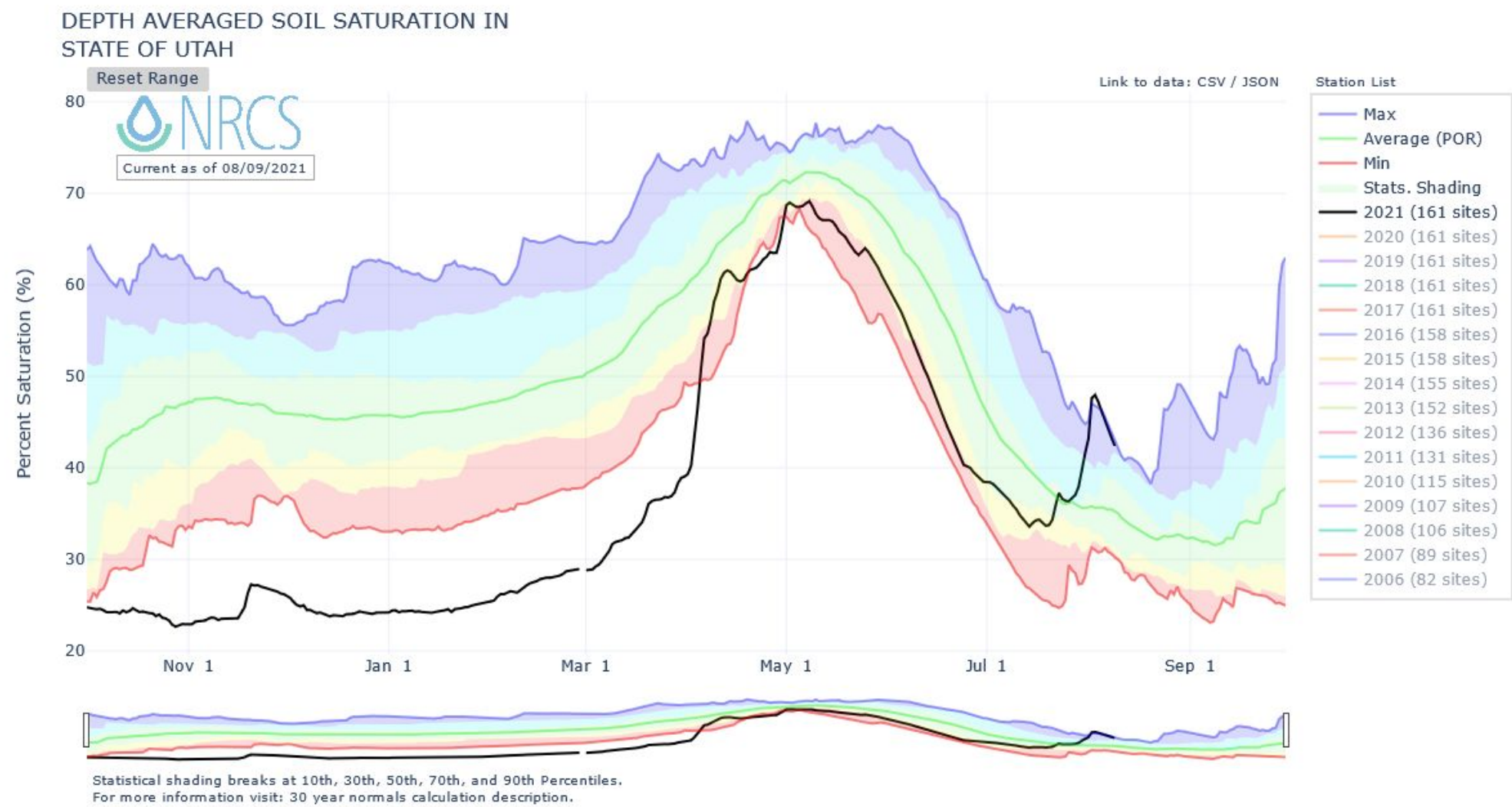
CPC has not updated the Aug-Oct outlook, since mid July.



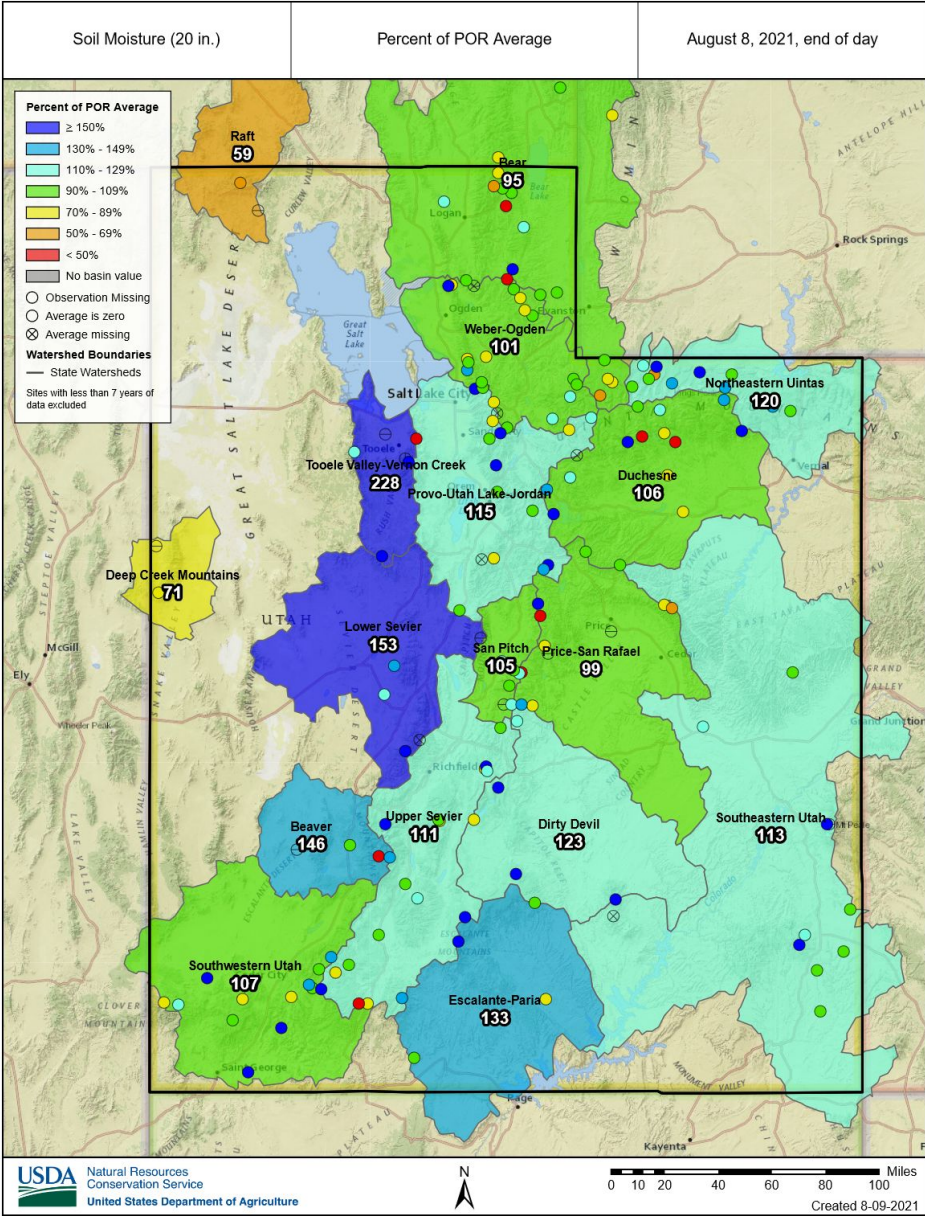
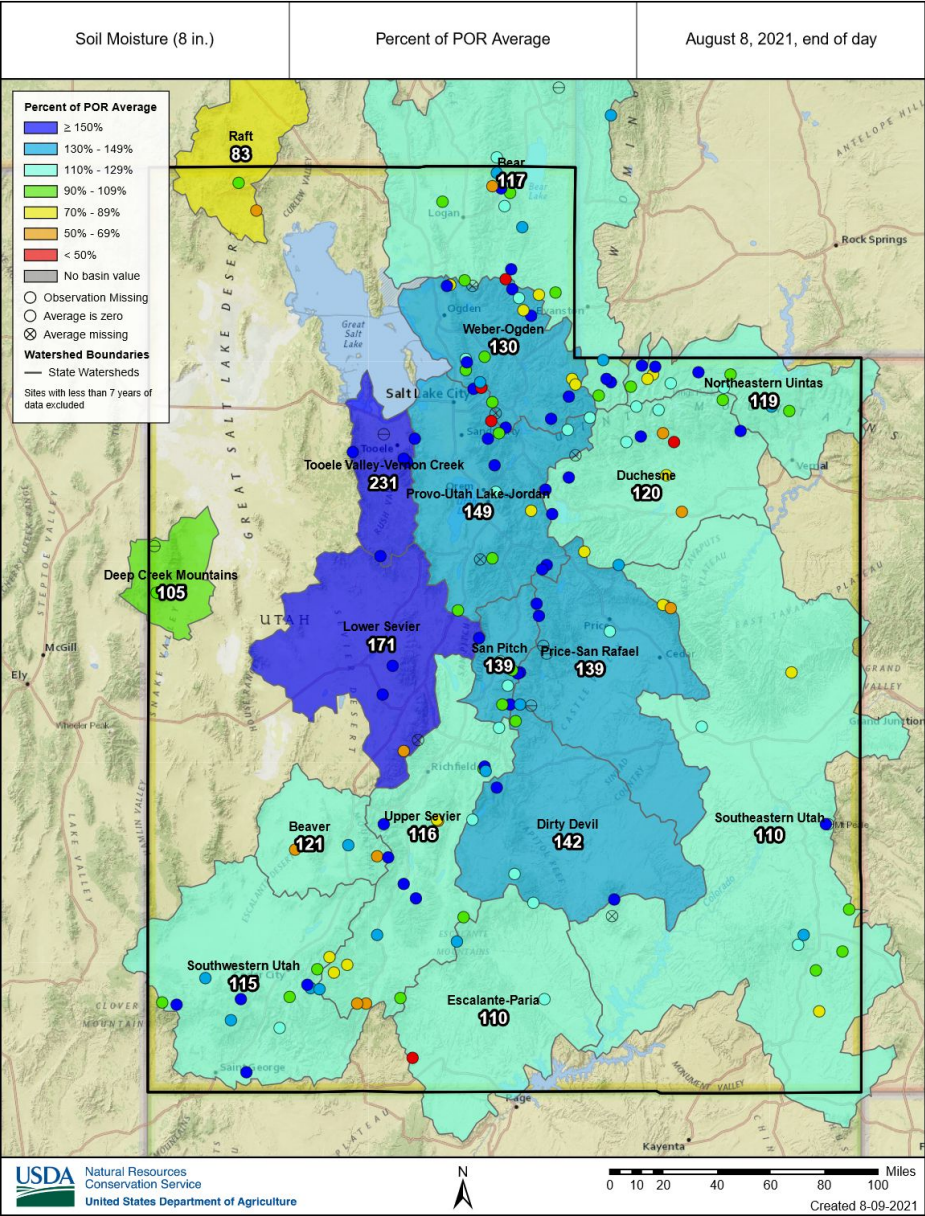
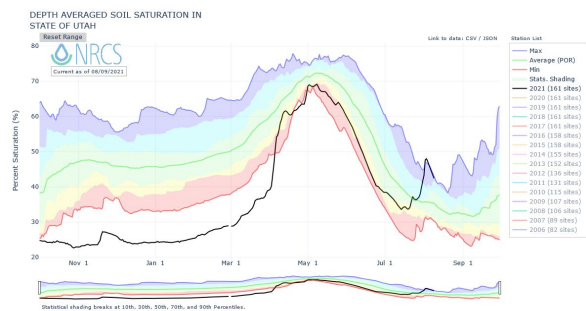
Precipitation



Soil Moisture



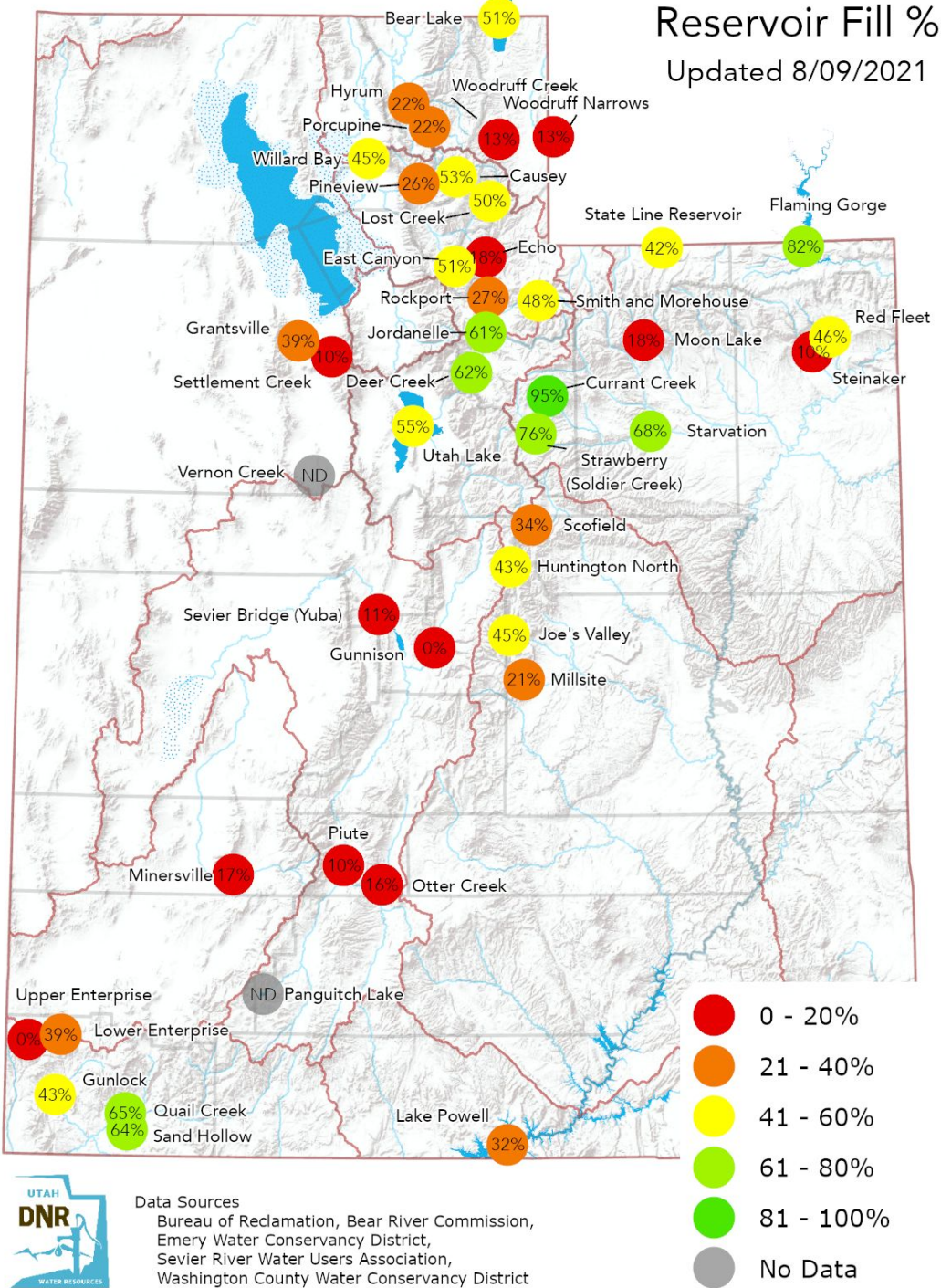
Soil Moisture



Agency - NRCS Snow Survey
Presenter - Jordan Clayton

Reservoir Fill %

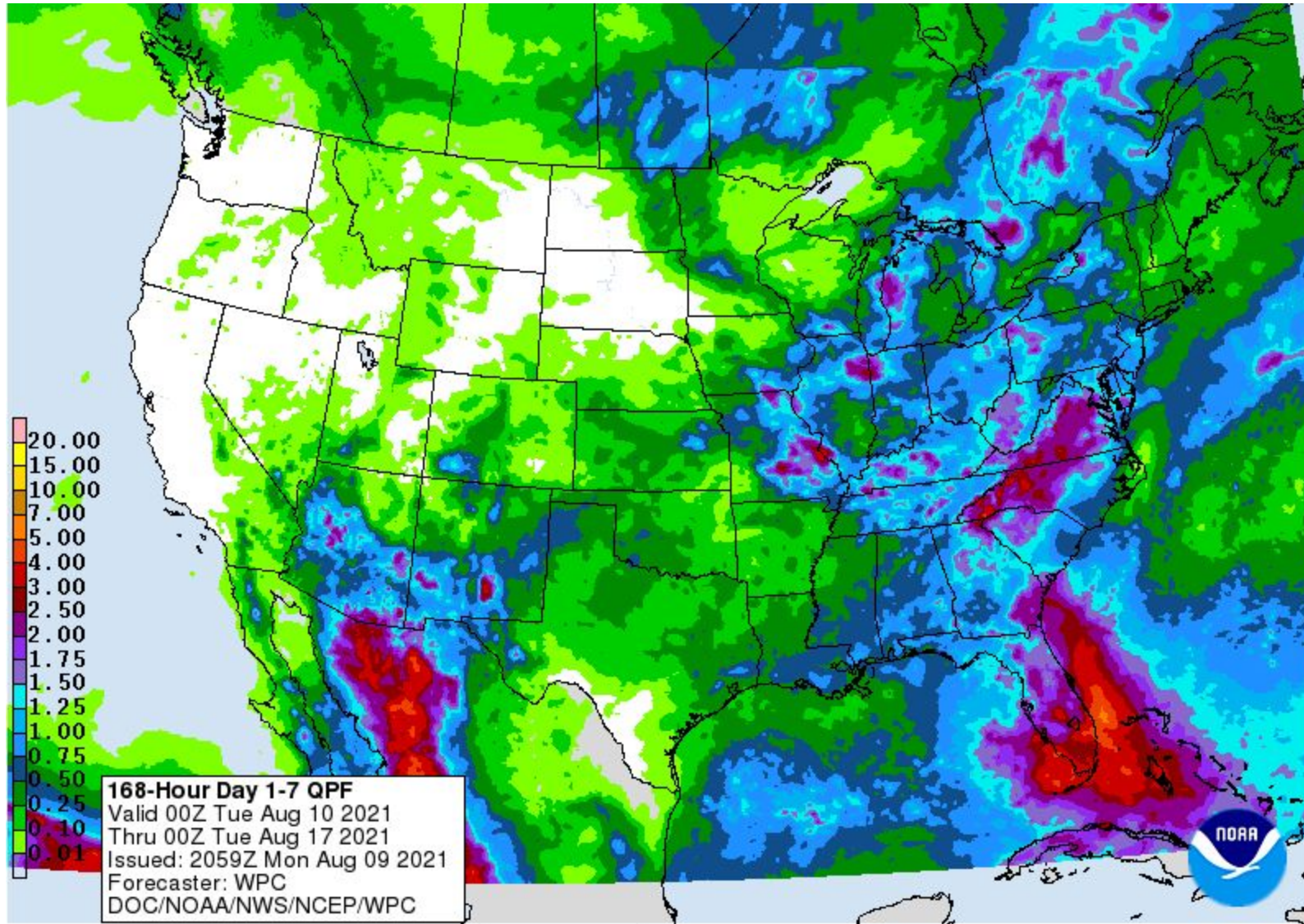
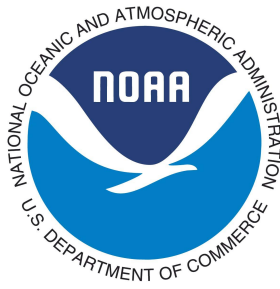
Updated 8/09/2021



Agency - Division of Water
Resources w/NRCS data
Presenter - Laura Haskell

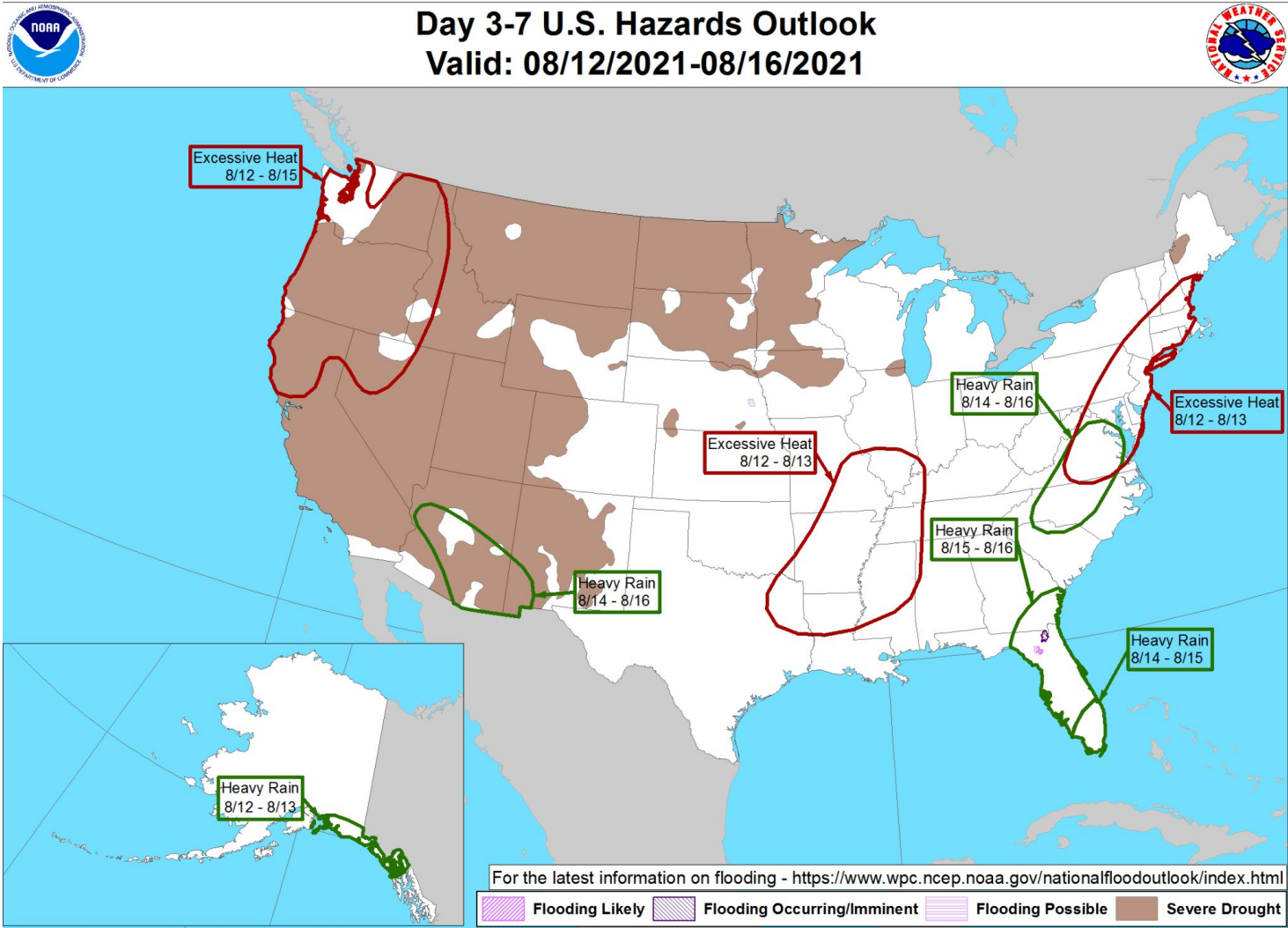


Weather Forecast Office Utah Day 1-7 Outlook



Agency - National Weather Service Weather Forecast Office
Presenter - Christine Kruse

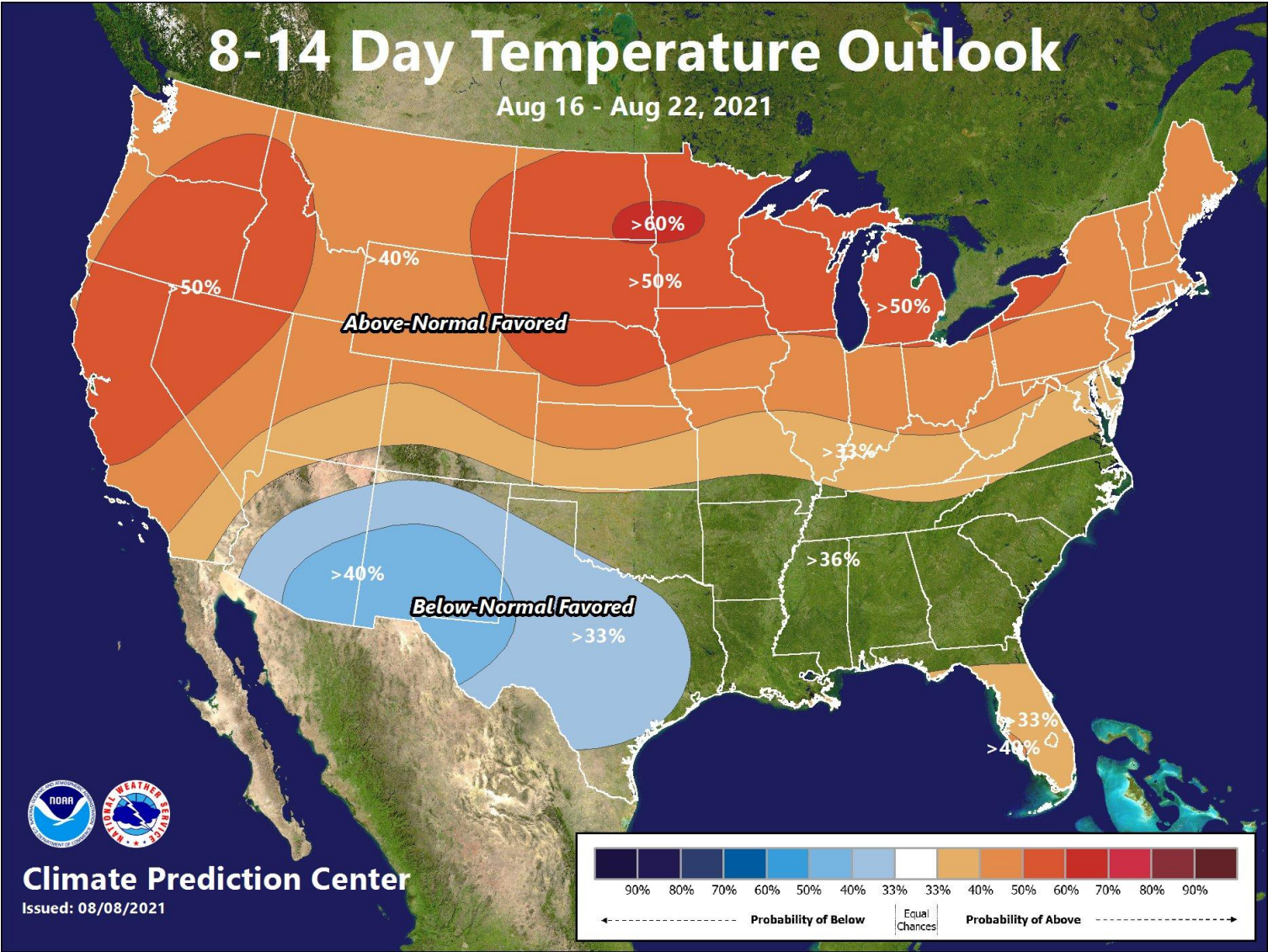
Weather Prediction Center U.S. Day 3-7 Hazards Outlook



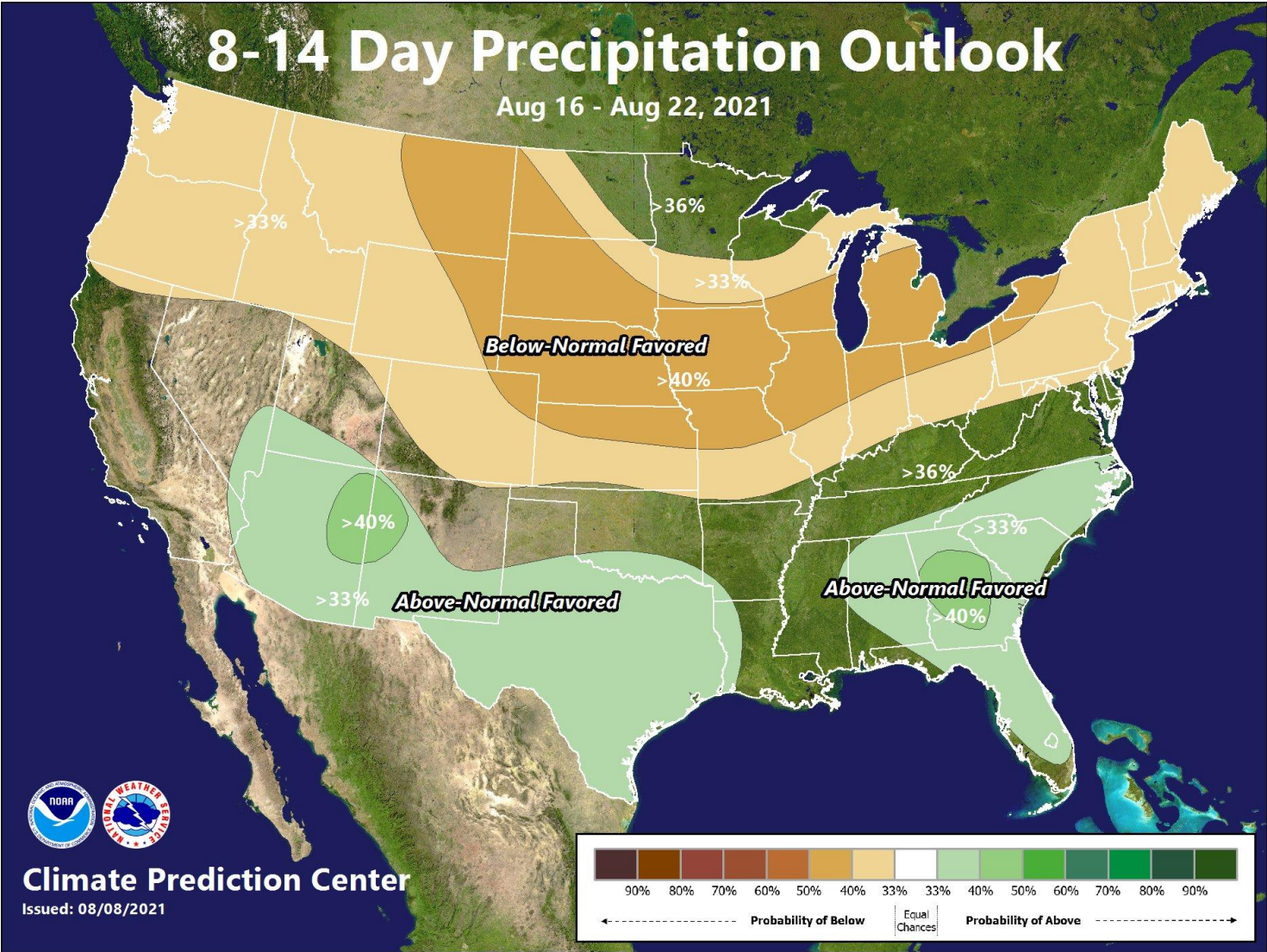
Weather Prediction Center
Made: 08/09/2021 3PM EDT

Follow us:  www.wpc.ncep.noaa.gov

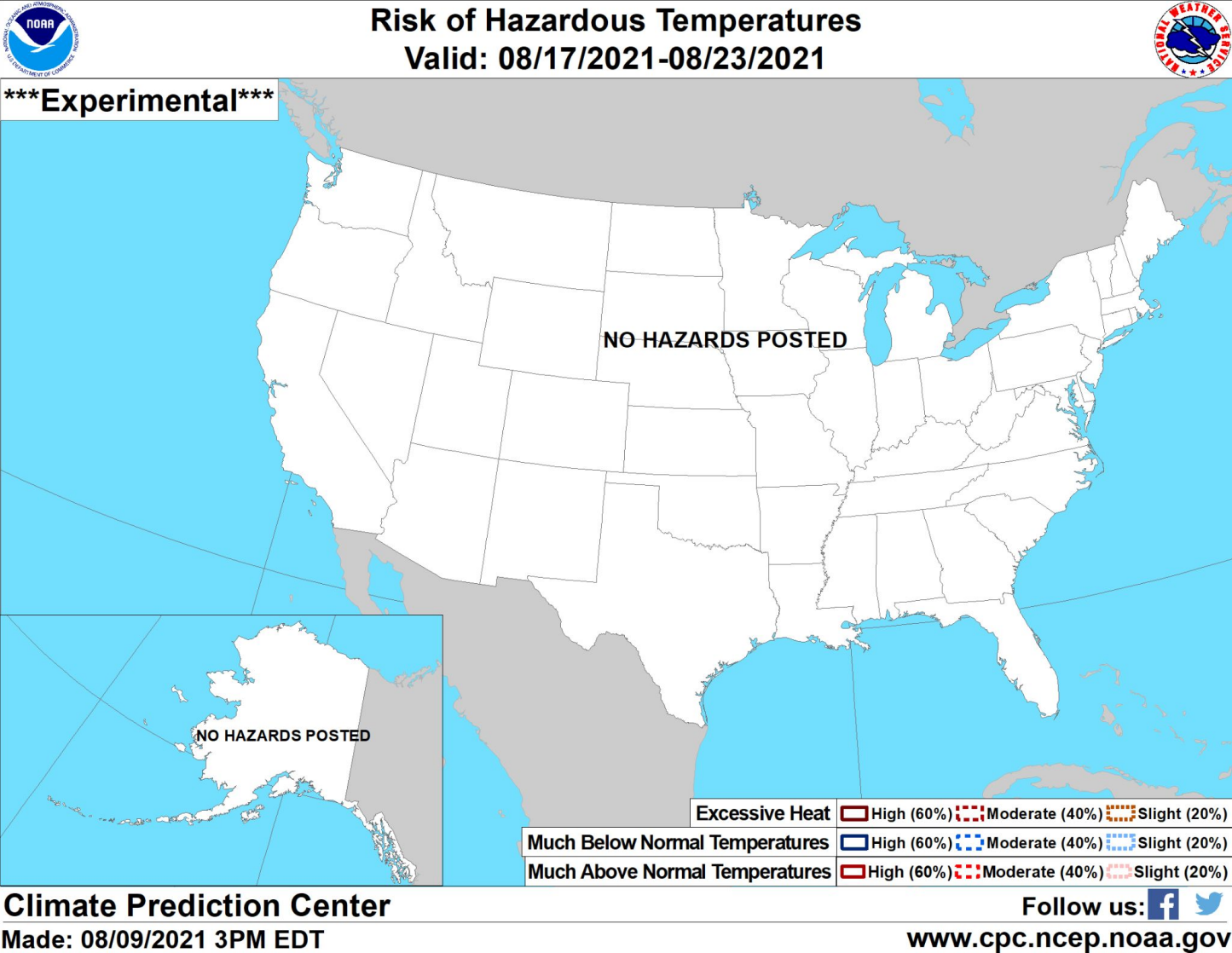
Climate Prediction Center 8 to 14 Day Outlooks - Temperature



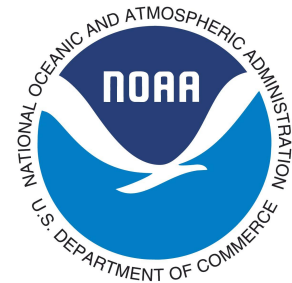
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



Climate Prediction Center U.S. Week-2 Hazards Outlook

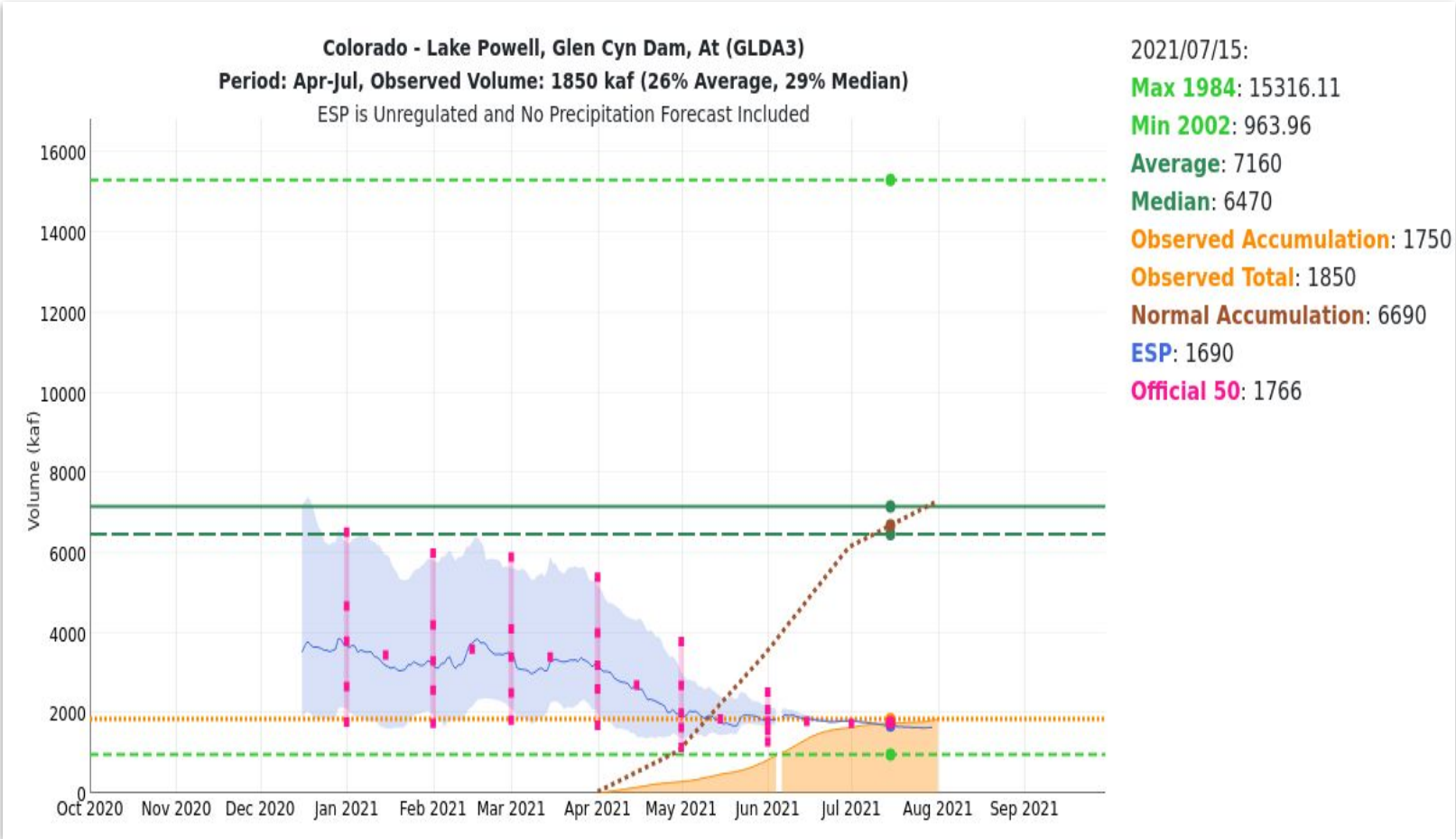


Utah Water Supply Forecasts / Observed 2021 Volumes

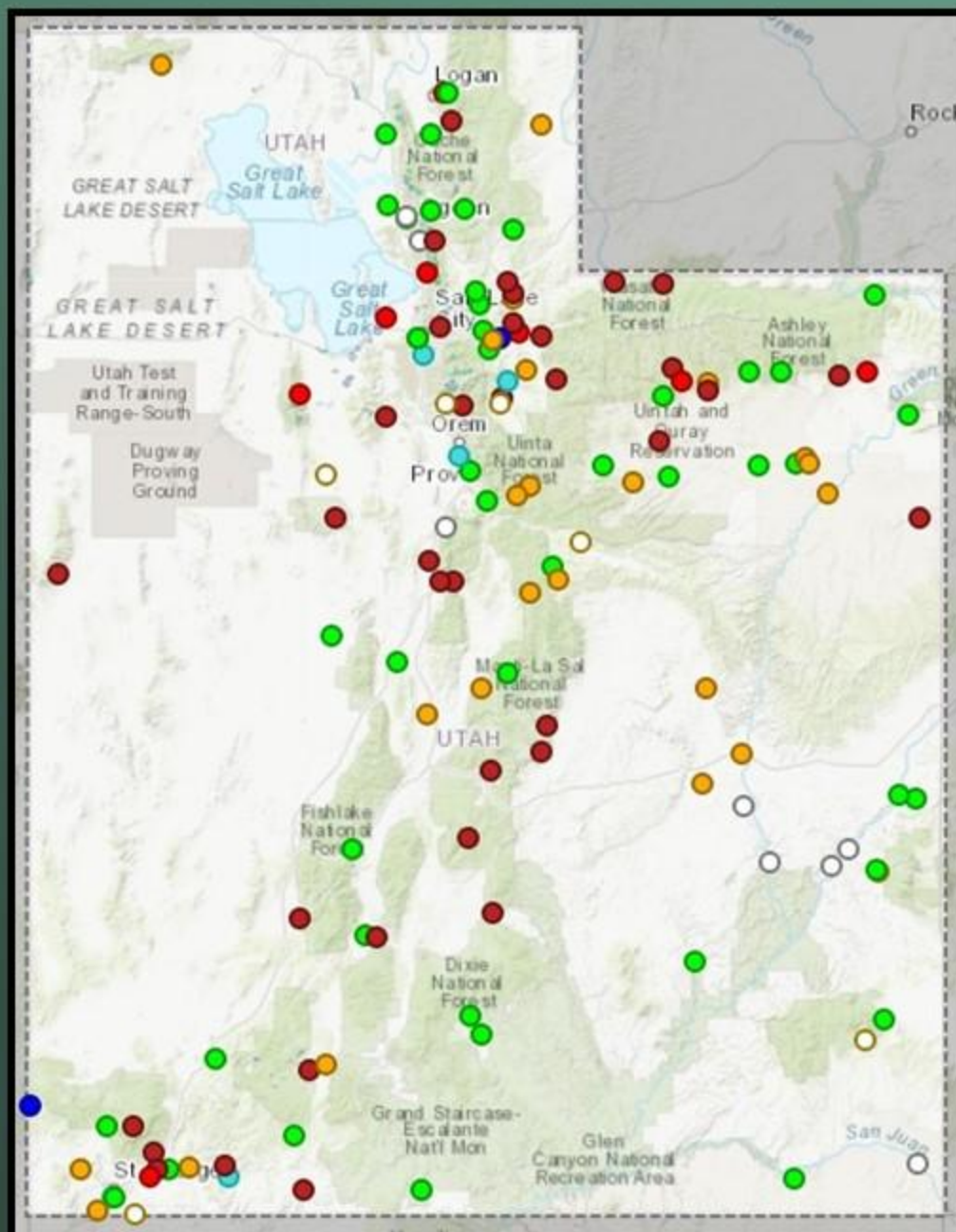


Observed Seasonal Volumes as a percent of average at:

Weber Gateway	18%
Bear Woodruff	21%
Six Creeks Parley's	17%
Utah Lake	35%
Sevier Piute reg	45%
Green River UT	28%
San Juan Bluff	45%
Lake Powell	26%



Current Streamflow Conditions



Streamflow Summary

STATION COUNTS BY FLOW STATUS

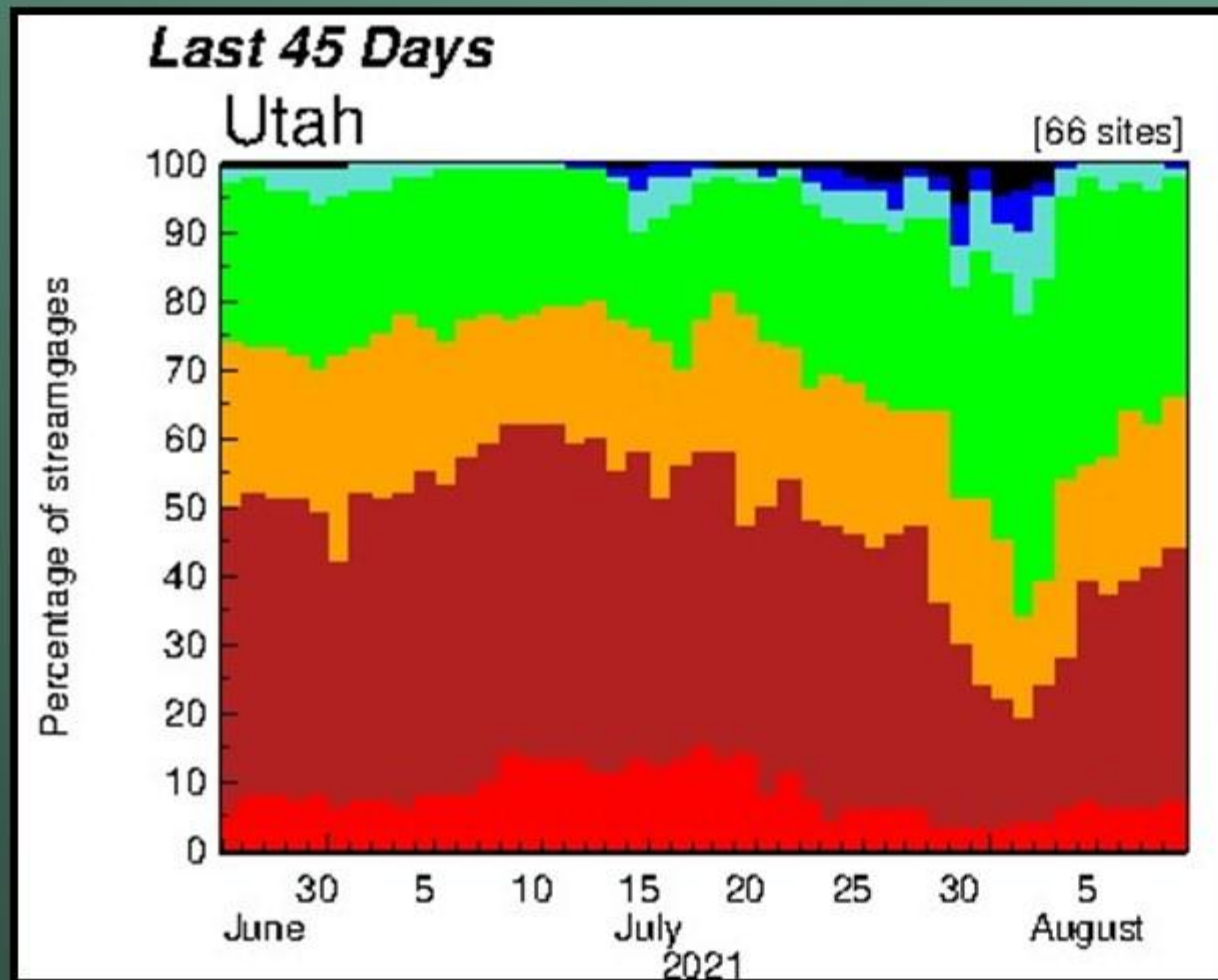
All-time low for this day-of-year	9	6.7%	
Much below normal for this day-of-year	35	25.9%	
Below normal for this day-of-year	25	18.5%	
Normal for this day-of-year	44	32.6%	
Above normal for this day-of-year	6	4.4%	
Much above normal for this day-of-year	2	1.5%	
All-time high for this day-of-year	0	0.0%	
Not ranked - insufficient record	14	10.4%	

Streams: Flow status

All-Time Low for this Day	0 th percentile (minimum)
Much Below Normal	<10 th percentile
Below Normal	10 th – 24 th percentile
Normal	25 th – 75 th percentile
Above Normal	76 th – 90 th percentile
Much Above Normal	>90 th percentile
All-Time High for this Day	100 th percentile (maximum)
Not Flowing	0 cubic feet per second
Above NWS Flood Stage	See Comments
Not Ranked	See Comments

*Sites must have at least 20 years of streamflow record to be ranked on this graphic

Current Streamflow Conditions



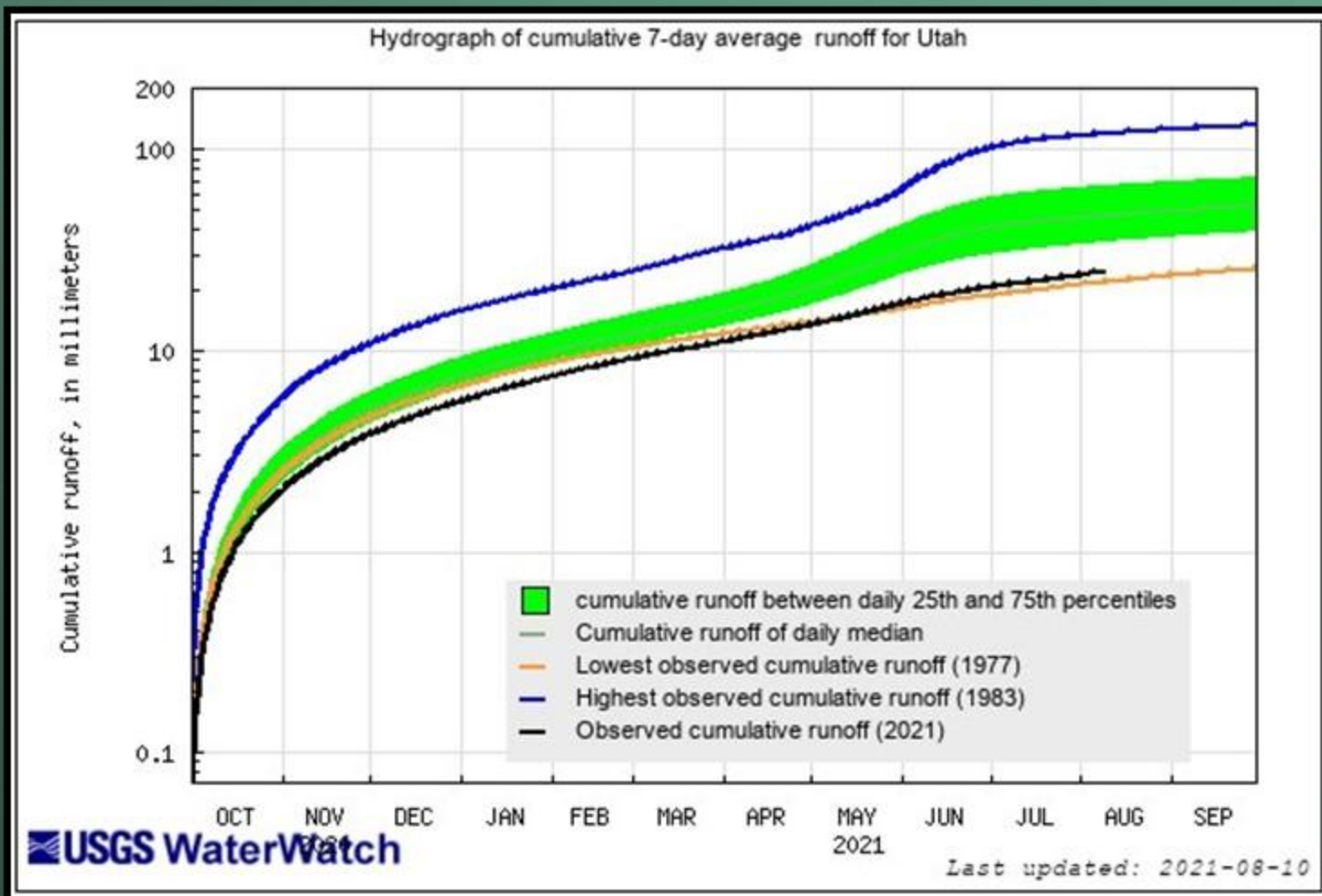
Real-time streamflow compared to historical streamflow for the day of the year

Sites must have at least 30 years of record to be included in this graphic



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Cumulative Streamflow



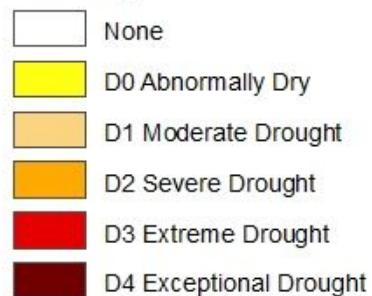
☐ Cumulative 7-day average runoff for water year 2021 is near the lowest on record

U.S. Drought Monitor

Utah

August 3, 2021
Released Thursday, Aug. 5, 2021)
Valid 8 a.m. EDT

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.asp>

Author:

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CPC/NOAA/NWS/NCEP

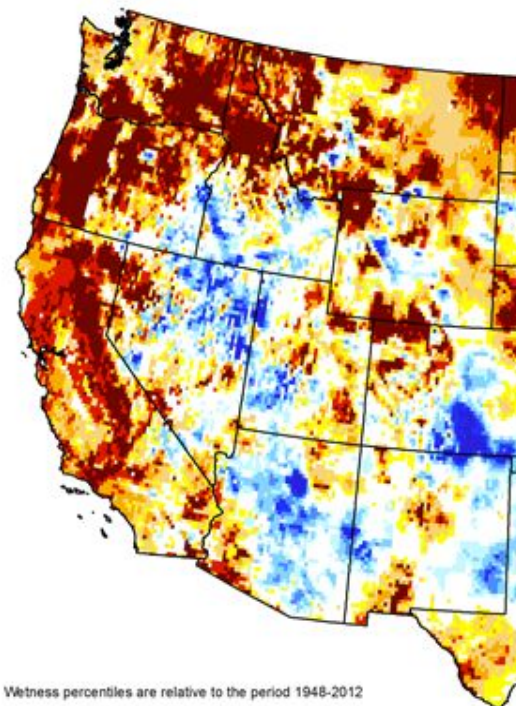


droughtmonitor.unl.edu



GRACE-Based Root Zone Soil Moisture Drought Indicator

August 02, 2021



Wetness percentiles are relative to the period 1948-2012

The rootzone is defined as the top 1 meter of soil

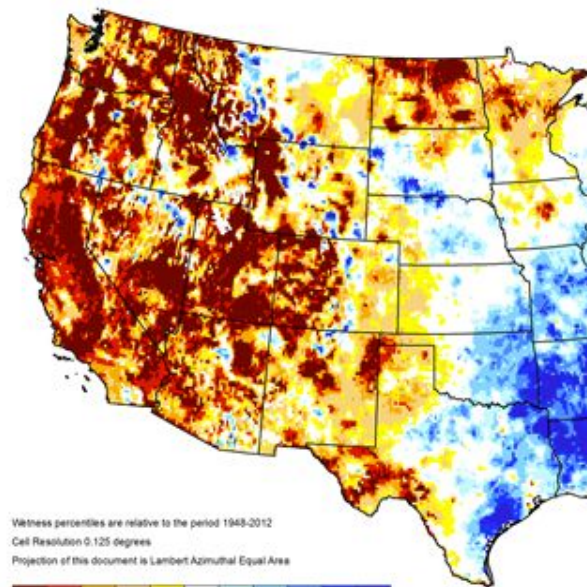
Cell Resolution 0.125 degrees

Projection of this document is Lambert Azimuthal Equal Area



GRACE-Based Shallow Groundwater

August 02, 2021



Wetness percentiles are relative to the period 1948-2012

Cell Resolution 0.125 degrees

Projection of this document is Lambert Azimuthal Equal Area



<https://nasagrace.unl.edu>